

**Amendments to the Drawings:**

The attached sheet of drawings includes changes to FIG. 1A. This sheet, which includes FIG. 1A and FIG. 1B replaces the original sheet including the same figures. In FIG. 1A, the typographic error listing the input/output to Box 141 has been corrected by changing "PHD" to --PDH-. Attached also is an annotated sheet showing the changes highlighted in red.

Attachment: Replacement Sheet for FIGs. 1A and B;  
Annotated Sheet Showing Changes

**REMARKS/ARGUMENTS**

Claims 1-3 and 5-21 are presently in the application, Claim 4 having been cancelled. Independent Claims 1, 16 and 19 have been amended and dependent claims 2, 3, 5, 7, 8, 9, 14, 17 and 20 have been amended. Accordingly, it is requested that the claims remaining in the application be reexamined in accordance with these amendments thereto and the following remarks and arguments.

In the outstanding Office Action, the Examiner objected to the specification, objected to the Abstract, objected to the drawings, objected to Claim 14, rejected Claims 8 and 9 as being indefinite, and rejected all of the claims in view of Parruck '271 alone or in combination with other references. No claim stands allowed or allowable.

**OBJECTIONS TO DRAWINGS**

The Examiner objected to FIG. 1A because the term "PHD" was not defined in the specification. This term is a typographical error and should have been "PDH," which term is defined in the specification as amended and is well known in the art to mean, "Plesiochronous Digital Hierarchy." Thus, the change in the drawings does not add any "new matter" to the application.

### **OBJECTIONS TO SPECIFICATION**

The Examiner objected to the specification because it did not provide proper antecedent basis for the claimed subject matter. In particular, the acronyms "PDH" and "SDH" were not defined in the specification.

As is well known in the art, the acronym "PDH" means "Plesiochronous Digital Hierarchy." As is also well known in the art, the acronym "SDH" means "Synchronous Digital Hierarchy." According, this objection has been obviated by amending the specification to add the complete words of each of these well known acronyms. It is submitted since these acronyms are well known in the art that no "new matter" has been added to the specification.

### **OBJECTION TO THE ABSTRACT**

The Abstract was objected to because it was in more than one paragraph and contained more than 150 words. This objection has been obviated by amending the Abstract to put it in one paragraph and to delete a sufficient number of words to make the 150 word limit. It is submitted that no "new matter" has been added by this amendment.

**OBJECTION TO CLAIM 14**

Claim 14 was objected to because it does not clearly describe the modules or a sufficient relationship between the claim elements. This objection has been obviated by amending Claim 14 to recite a sufficient relationship. Accordingly, it is submitted that Claim 14 no longer has any informalities.

**CLAIM REJECTIONS UNDER 35 USC §112, SECOND PARAGRAPH**

Claims 8 and 9 were rejected as being indefinite because the Examiner stated that neither claim contains an antecedent basis for the term, "basic switching fabric." This rejection has been obviated by amending Claims 1, 8 and 9 to add the word, "block" to this element. Thus, in amended Claim 1, in the seventh line thereof, the claim has been amended to recite "basic switching fabric SF block." Claims 8 and 9 have been similarly amended. Foundation for this amendment in the original application is found at least in the specification and in FIG. 2 at element 38.

Accordingly, it is submitted that the rejection of Claims 8 and 9 as being indefinite has been obviated by the amendments to the Claims. It is submitted that this amendment does not narrow the scope of either Claims 1, 8 or 9.

**CLAIM REJECTIONS UNDER 35 USC § 102(e)**

Claims 1-6, 10, 11, 13, 1-19 and 21 are rejected as being anticipated by the US patent Parruck et al. (US 7,139,271). Claim 4 has been cancelled and these rejections are respectfully traversed with respect to the other claims as they have been amended.

Initially, it is pointed out that the following distinctive features of the present invention as now claimed exist over the Parruck reference:

Firstly, the present invention differs from the Parruck's solution by the Distribution Block which is a cross-connecting block or a configurable switching matrix (page 6, lines 11-15 of the original description) and which by no means is not equal to control bus 131 of Parruck (notwithstanding the statement by the Examiner that they are equivalent).

Bus 131 of Parruck cannot be considered equivalent the DB of the invention, since bus 131 does not distribute connections between ports and AFBs; bus 131 distributes control signals which may adjust MS-SAR blocks in the line cards of Parruck.

Secondly, the DB block of the present invention is positioned between a plurality of I/O ports on one hand and a common pool of Adaptation Functions blocks (AFBs) on the other hand. Such an arrangement allows connecting any I/O port of a

plurality of I/O line cards ( I/O blocks or cards 30, 32, 34..  
39 of our Fig. 2, page 14 line 5) to any AFB from the common pool  
of AFBs.

Thirdly, the common pool of AFBs, being separated from the line cards (I/O blocks) by a DB block, is associated with or just spatially positioned within one or more blocks of the switching fabric SF (38, 50, 52 of our Fig. 2).

In view of the above distinctive features, it is clear that the solution described and illustrated by Parruck is similar not to the present invention, but to the prior art arrangement shown in Fig. 1A of the present application, where each line card (of a total number of line cards of, for example, 14) has an I/O port (141) coupled with an adaptation function (142) serving only that I/O port. MS-SAR 125 or 126 of the line card 101 of Parruck (Figs. 4, 5), even being a multi-service block, still serves only one port (115 or 116) of the line card 101.

Parruck, in Figs 4 and 5, shows a Line Card 101 where each port (input port 115 or output port 116) in the card is equipped with a controllable "multi-service segmentation and reassembly" (MS-SAR). The Examiner says that control signals from CPU 106 via bus 131 may adjust the MS-SAR so that any port [of the line card] can be connected to any AFB.

In other words, each of the two ports of the line card is provided with such a multi-functional MS-SAR, and any I/O port on

the card can be connected to "any function" provided by the MS-SAR coupled to that I/O port".

In contrast to that, Fig. 2 of the present invention shows that any I/O port (P1, P2, ...Pn..., ) of any line card (I/O blocks or cards 30, 32, 34,... 39) can be connected to any AFB of the common pool (AFB1....AFBm...) via the DB block 36.

This idea is further supported in the description, see pages 9, lines 1-413-15; page 10, lines 8-9; page 16, lines 22-24, etc.

A certain degree of versatility is reached in the Parruck's solution, however this versatility is incomplete and non-efficient, since:

(a) it costs a lot of money to equip each and every I/O port in each and every card; and

(b) an I/O of one line card may never be connected to MS-SAR of another port of that card and of course not to MS-SAR of another card.

In comparison and in contrast with the Parruck reference, the present invention:

- gives a very economic solution for any desired conversion of data streams;
- allows easy upgrade of the AFBs pool by just adding to the pool (not to each of the line cards!) one or more required AFB blocks,
- allows any local I/O port of any I/O card to be

connected to any AFB of the common pool. It means that any, even a newly added AFB not intended for a specific I/O port or specific card, can be connected to that specific port/card.

The combination of the distinctive features in the present invention, i.e., the separation of a plurality of I/O blocks from AF blocks, the creation of the common pool of AF blocks (AFBs), the positioning of a cross-connecting DB there-between, and the positioning of the common pool of AFBs within the switching fabric SF block(s), - allows obtaining versatile adaptation function chains for any incoming data stream regardless the spatial position of its input and output port or card.

Namely, the present invention allows creating any desired connection for any traffic stream entering any input port among said plurality of ports in any of the line cards, to any required AFB of the pool via DB, and then via SF to any additional AFB of the pool (if required) and finally, via the same DB, to any output port at any line card. Such chains cannot be formed by the Parruck's solution.

Finally, the configuration proposed in the present invention enables reaching all the above advantages even if a specific I/O port is territorially placed very far from the AFB which is required for a traffic stream entering the specific I/O.



**CLAIM REJECTIONS UNDER 35 USC § 103**

The Examiner rejected dependent Claims 7, 8 and 9 as being obvious over the combination of the Parruck patent and the Tsukamoto patent; rejected dependent Claims 11, 15, and 20 as being obvious over the combination of the Parruck patent and the Slater patent; and rejected dependent Claim 14 as being obvious over the combination of the Parruck patent and Ofek patent.

Each of these rejections is traversed in so far as any one or more of them would be applied to the amended claims. It is submitted that each of the foregoing rejected dependent claims are patentable at least for the reasons stated above with respect to the independent claims from which they respectively ultimately depend.

**CONCLUSION**

It is submitted that the independent claims, Claims 1, 16 and 19, and consequently all the dependent claims, are patentable over the amended claims.

If an Extension of Time under 37 CFR §1.136 is required, this Transmittal Letter includes a request for such an Extension of Time as necessary to make this filing timely, and is an authorization to charge any fee for such Extension of Time, as may be required by 37 CFR §1.17, to Deposit Account No. 14-0112.

Also, please charge any fee deficiency, or credit any  
overpayment, in connection with this matter to Deposit Account  
No. 14-0112.

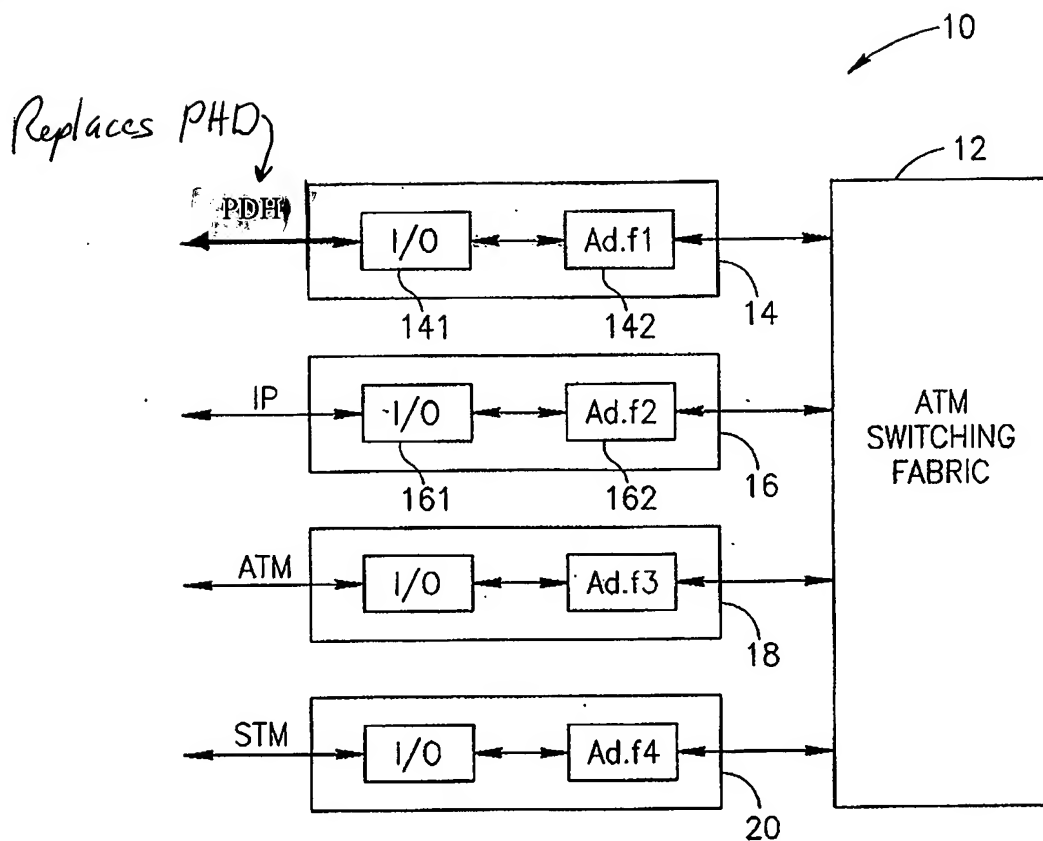
Respectfully submitted,

A handwritten signature in black ink, appearing to read "Harold L. Novick", written over a horizontal line.

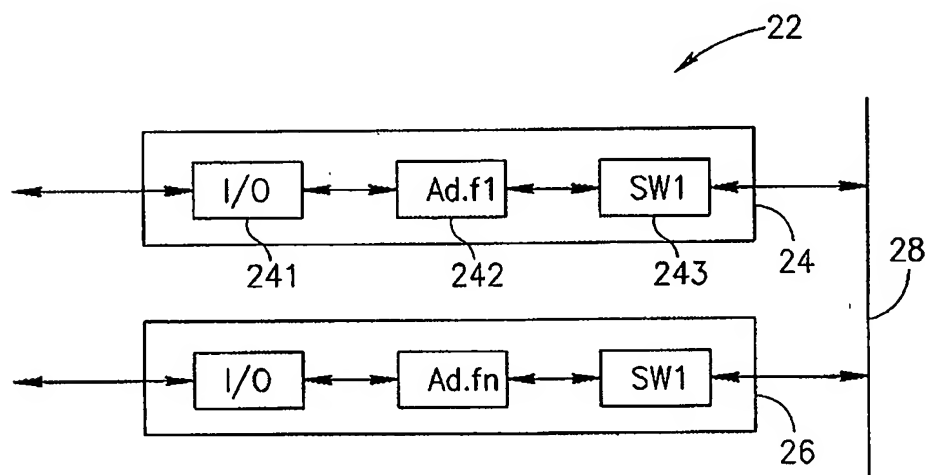
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**FIG.1A**  
(PRIOR ART)



**FIG.1B**  
(PRIOR ART)